

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
21 July 2005 (21.07.2005)

PCT

(10) International Publication Number
WO 2005/066244 A2

(51) International Patent Classification⁷: **C08J 3/00, 5/24**

(21) International Application Number:
PCT/GB2005/000032

(22) International Filing Date: 7 January 2005 (07.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0400403.2 9 January 2004 (09.01.2004) GB
0416927.2 29 July 2004 (29.07.2004) GB

(71) Applicant (for all designated States except US): **THE UNIVERSITY OF SHEFFIELD** [GB/GB]; Western Bank, Sheffield S10 2TN (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **JONES, Frank** [GB/GB]; 1 White Hart Corner, Eckington, Derbyshire S21 4DY (GB). **HAYES, Simon, A.** [GB/GB]; 46 Allenby Drive, Greenhill, Sheffield S8 7RS (GB).

(74) Agent: **HALL, Robert, L.**; Harrison Goddard Foote, Fountain Precinct, Balm Green, Sheffield S1 2JA (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



WO 2005/066244 A2

(54) Title: SELF-HEALING COMPOSITE MATERIAL

(57) Abstract: A self-healing composite material comprising a fibre-reinforced polymeric matrix, wherein the polymeric matrix comprises a thermosetting polymer and a thermoplastic polymer.